

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.			
10/575,012	07/05/2006	Romain Desplats	0512-1332 7037				
466	7590 08/08/2007 EXAMINER						
YOUNG & THOMPSON 745 SOUTH 23RD STREET			PATIDAR, JAY M				
2ND FLOOR ARLINGTON, VA 22202			ART UNIT	PAPER NUMBER			
AREINGTON	, 111 22202		2862				
				·			
			MAIL DATE	DELIVERY MODE			
	•		08/08/2007	PAPER			

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

					ت			
		Application	No.	Applicant(s)				
Office Action Summary		10/575,012		DESPLATS ET AL.				
		Examiner		Art Unit				
		Jay M. Patida		2862				
The MAII Period for Reply	LING DATE of this communication app	pears on the c	over sheet with the c	orrespondence address				
WHICHEVER IS - Extensions of time I after SIX (6) MONT - If NO period for rep - Failure to reply with Any reply received	O STATUTORY PERIOD FOR REPLY S LONGER, FROM THE MAILING DAMAY BE available under the provisions of 37 CFR 1.13 (HS from the mailing date of this communication. It is specified above, the maximum statutory period whin the set or extended period for reply will, by statute, by the Office later than three months after the mailing adjustment. See 37 CFR 1.704(b).	ATE OF THIS 36(a). In no event, will apply and will exe, cause the applica	COMMUNICATION however, may a reply be tim kpire SIX (6) MONTHS from tion to become ABANDONE	I. lely filed the mailing date of this communic 0 (35 U.S.C. § 133).				
Status								
1) Responsi	ve to communication(s) filed on	<u></u> .						
2a)☐ This actio	This action is FINAL . 2b)⊠ This action is non-final.							
<i>,</i> —								
closed in	accordance with the practice under E	Ex parte Quay	de, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Clai	ims							
4) Claim(s)	1-12 is/are pending in the application.	l .						
	above claim(s) is/are withdraw		ideration.					
5) Claim(s)	is/are allowed.							
6)⊠ Claim(s)	<u>1-12</u> is/are rejected.							
·	is/are objected to.							
8) Claim(s)	are subject to restriction and/or	or election req	uirement.					
Application Paper	s							
9)∏ The specif	fication is objected to by the Examine	er.						
10) ☐ The drawi	ng(s) filed on is/are: a)☐ acce	epted or b)	objected to by the B	Examiner.				
	may not request that any objection to the							
	ent drawing sheet(s) including the correct							
11) The oath o	or declaration is objected to by the Ex	xaminer. Note	the attached Office	Action or form PTO-15	2.			
Priority under 35 L	J.S.C. § 119							
	dgment is made of a claim for foreign ☐ Some * c) ☐ None of:	n priority unde	r 35 U.S.C. § 119(a))-(d) or (f).				
1.☐ Ce	rtified copies of the priority documents	ts have been	received.					
	rtified copies of the priority documents							
	pies of the certified copies of the prior			ed in this National Stage	;			
	plication from the International Bureau	•						
* See the att	ached detailed Office action for a list	of the certifie	d copies not receive	ed.				
Attachment(s)								
 Notice of Reference Notice of Draftsperior 	ices Cited (PTO-892) erson's Patent Drawing Review (PTO-948)	4) Interview Summary Paper No(s)/Mail Da					
	osure Statement(s) (PTO/SB/08)	5 6) Notice of Informal P					

Application/Control Number: 10/575,012 Page 2

Art Unit: 2862

1. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

- 2. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.
- 3. The abstract of the disclosure is objected to because the abstract does not set forth the nature and gist of the invention.

Correction is required. See MPEP § 608.01(b).

4. Claims 1-6,8-12 are objected to because of the following informalities:

In claim 1, at line 2, "at least one MR" is claimed while at line 5 "two MRs" are being claimed; the phrase "selected measurement axes are angularly offset" is not clearly defined and understood; it is unclear from the language of the claim as to how they are angularly offset;

In claim 2, there is no antecedent basis for "same semi-conductor substrate" at line 4;

Application/Control Number: 10/575,012

Art Unit: 2862

In claims 2-5,11, it is also unclear as to whether the sensors at line 2 or 3 are the same as the ones claimed in claim 1 or are different sensors;

In claim 3, the phrase "axes are perpendicular in pairs" is vague;

In claim 4, the phrases "sensors of each same pair" and "sensors of two separate pairs" are vague since it is not clear as to what is meant by "same pair" or "separate pair"; the structure or scope of the claim is unclear from the language of the claim;

In claim 5, the phrases "same triplet" are "separate triplets" are vague; the structure as claimed is not clearly understood;

In claim 6, it is unclear as to what is meant by "in accordance with two layers"; it is unclear as to what the layers are and how they are structurally cooperate with other elements of the device;

In claims 8,12, the phrase "sensors of the same layer" is vague since it there are only two sensors (as claimed in claim 1), are these both sensors on the same layer?

In claim 9, there is no antecedent basis for "same layer";

In claim 10, there is no antecedent basis for "various processing chains"; the phrase "processing chain" is unclear; it is not understood as to what the processing chain is and its function;

In claim 11, "perpendicular in pairs" is vague.

Appropriate correction is required.

5. The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-12 (insofar as understood) are rejected under 35 U.S.C. 102(b) as being anticipated by Acker (6,427,314).

As to claims 1,6-9,12, Acker discloses a device measuring magnetic field including a plurality of magnetoresistive sensors wherein the measurement axes e.g. 250,262 are angularly offset (Fig. 9; col. 23, lines 33-49).

As to claims 2,11, the magnetoresistive sensors are mounted on the same substrate e.g. 254 (fig. 9).

As to claim 3, Acker discloses three magnetoresistive sensors being perpendicular to each other (fig. 9).

As to claims 4-5, the magnetoresistive sensors have their axes parallel and offset relative to each other (fig. 9, sensors on the side panel).

Application/Control Number: 10/575,012

Art Unit: 2862

As to claim 10, Acker discloses processing chain 256 for processing the signals from the magnetoresistive sensor elements (fig. 9).

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Note PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jay M. Patidar whose telephone number is 571-272-2265. The examiner can normally be reached on M-Thur 7:00-5:30.

The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Art Unit: 2862

Page 6

/Jay M. Patidar/
Jay M. Patidar
Primary Examiner
Art Unit 2862
Email: Jay.Patidar@USPTO.gov

August 1, 2007